Abstract

A mechanical arm includes a base that mount on a selected support. A proximal arm member has a proximal end portion pivotally secured to the base and a distal end portion pivotally secured to a distal arm member. The base has a first fixed gear element disposed thereon, and a second fixed gear element is disposed on the distal arm member. A drive shaft is rotatably disposed on the proximal arm member and includes a first end portion provided with a first drive gear engaging the first fixed gear element and a second drive gear provided with a second drive gear engaging the second fixed gear element such that rotation of the drive shaft acts to pivot the arm members. A drive acts to rotate the drive shaft.